**K-5 Math Lesson Plan**

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| **Teacher:**  **Nancy Williams,**  **Northern Elementary** | | | | **Grade:**  **2nd** | | | | **Date(s)**:  August 30, 2012 (#3)  **Day 2 of Task 1** |
| **Unit Title:**  Unit 1: Understand Place Value (Hundreds, Tens, Ones) | | | | | **Corresponding Unit Task:** *The performance task that this particular lesson will lead to.*  Take an inventory of the school supply store by determining how many items are leftover from last year. Use skip counting to help you find the total number of each item. | | | |
| **Essential Question(s):**  How do patterns help me skip count? How do I compose numbers up to 1000? How do you know the value of a number?  *(These stay up during the entire 25 days)* | | | | | | | | |
| **Materials/Resources** | | | | | | | **Essential Vocabulary** | |
| **Teacher:**   * Overhead of hundreds board to 1000 * Discs to cover up numbers * Large number of beans or small objects (optional)   <http://www.ictgames.com/LIFEGUARDS.html>  This is a good game of skip counting by tens and ones using a number line. Could be used in a center or computer time. | | | **Student:**   * Hundreds boards to 1000   <http://www.treasureforteachers.com/hundchart2.pdf>  (This is a hund chart that goes from 1 – 1000)  It would be best to copy on cardstock to use often as well as worksheet for students to use in this lesson   * Discs to cover up numbers for each student * Student Math journals * pencil | | | | hundreds tens ones  skip counting | |
| **Learning Experience** | | | | | | | | |
| **8 Mathematical Practices:**  1. Make sense of problems and persevere in solving them.  2. Reason abstractly and quantitatively.  3. Construct viable arguments and critique the reasoning of others.  4. Model with mathematics.  5. Use appropriate tools strategically.  6. Attend to precision.  7. Look for and make use of structure.  8. Look for and express regularity in repeated reasoning. | **Common Core State Standards:**  **2.NBT.1: *Understand that the 3-digits of a 3-digit number represent the amount of hundreds, tens, and ones.***  **2.NBT.2: *Count within a 1000; skip count by 5’s, 10’s, 100’s.*** | | | | | | | |
| **I Can Statement(s):** *(These will be present during this lesson only)*  I can skip-count to 1000 by 10’s and 100’s to 1000. (100s will be tomorrow).  I can understand that each digit in a 3-digit number represents hundreds, tens and ones. | | | | | | | |
| **Activating Strategy/Hook:** *(How will students become cognitively engaged and focused?)*  Play Cherry Pie: Have students sit in a circle on the carpet. Give students a number to start with (30) and have children count by 10s until everyone has said a number. Then start higher, 145 and do the same with 10s again. Write the numbers on the board as they are saying them. Do the same for 100’s. Ask children to tell about the changes in each number.  OR TEACH RINGO RANGO SONG.  Show students a huge amount of beans. Ask them to share strategies of how to count the beans and then model the various ways. | | | | | | | |
| **Teacher Directed:**  **This part is for exposure:** Show students a number line with increments evenly spread out but without numbers. Put 200 on one end and 310 on the other end. Ask students to count by 10s and model how to move on the number line by drawing arrows to each increment. As you are writing the arrows, write the number under each increment. Explain to students that this is another method for counting on, besides using hundreds boards. Do this a few times with various numbers. Have students tell you what numbers to write at each increment.  **Similar to yesterday, only this time do this with 100s.**  Using a large or overhead 100s board 1- 100 (but have the following boards ready). Review yesterday’s lesson by placing a chip on 50 and have students tell you to count by 10s and place a chip on each number. Once again, when they get to 100, ask st to tell you what’s next. Remove the overhead and put the 101 – 200 board and do the same. Continue to do this until they get to the end of each board. Have children tell about the patterns they see.  Now start with \_\_00 and ask children to count by 100s. Place chips on these numbers and see if students recognize patterns similar to yesterday’s counting by 10s. At this time, show students the number line again with 200 – 700 on the line.  **For exposure again:** Model for students how to move on the number line counting by 100s writing numbers 400 – 1000. | | | | | | | |
| **Guided Practice:**  Pass out various 100 boards to pairs of students so that each set of partners have different boards (1-100, 101-200, 201-300, etc.) and chips to cover numbers. If you have more than 20 students, you can put a group of 3 with one board.  ***Just like yesterday***, review what we did with 10s except this time, see if students can do it faster by timing them. Say a number and have students put a chip on that number. Have the children with the board say the number that is counting by 10s. When they get to the end, the next group says their number that is next counting by 10s until you get to 1000.  Ex: T: 260  Group with 201-300 will put a chip on and say: 270, 280, 290, 300.  Group with 301 – 400 will say: 310, 320, 330, 340, 350, - 400  This time, have the students stand as they say the next number counting by 100s since there will only be one number for them to say.  T: 300  Group with 301-400: They stand and say: 400  Next group with 401-500: They stand and say: 500  As they are saying it, write the numbers on the board going down. Have students notice the patterns. | | | | | | | |
| **Independent Practice:**  In their journals, students will write numbers starting with any given number and count by 10s (review from yesterday) and/or 100s going down so the answers are similar to what they saw on a hundreds board.  Show students that they can count by tens and/or 100s by drawing the number line as well. Able students may write going across. Teacher will monitor walking around to verify student understanding. | | | | | | | |
| **Closing/Summarizing Strategy:**  Students can share their answers by coming to the board and writing answers. Teacher can compare students that are drawing with number lines vs. students that write numbers only.  Teacher asks: *How are numbers counting by tens similar and different? How are numbers counting by hundreds similar and different?* | | | | | | | |
| **Differentiation Strategies** | | | | | | | | |
| **Extension** | | **Intervention** | | | | **Language Development** | | |
| Skip count by numbers other than 2’s, 5’s and 10s.  Skip count starting with other numbers rather than the general numbers with 0 in the ones. | | Have students use the base ten blocks and count by tens and 100s, making note of the number that is in the tens/hundreds digit.  They can also count beans and group them by tens/fives into baggies and then count the total. | | | | Have beans/beads or small objects for students to count to 10 by 1s. Then group each 10 in a bag so students can count by tens. | | |
| **Assessment(s):**  Play Cherry Pie again starting with higher numbers. Make informal notes about students that struggle to find next number. Use students’ journals as another informal assessment for understanding. | | | | | | | | |
| **Teacher Reflection:** (Next steps?) *This is for after the lesson has completed. Teachers will need to decide on what went right/wrong and complete this here.* | | | | | | | | |